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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,574

02/16/2006

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06006

5112

23338 7590 07/20/2010
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EXAMINER

MOHANDESI, IRAJ A

ART UNIT

PAPER NUMBER

2839

MAIL DATE

DELIVERY MODE

07/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/27/09 have been fully considered but they are not persuasive. Thaxton'139 discloses a marine power distribution

arrangement of propulsion system for ships with a synchronous, with permanent magnet electrical generator (12 "Fig .3 does not show any excitation input to the magnet"), an electrical output and a plurality of poles, powered directly by the driving machine; a synchronous, permanent magnet electrical propulsion motor.

2. However, the citation of the ratio of poles between the generator and the propulsion motor suggest the use in Thaxton et al of a synchronous permanent magnet generator directly connected to a synchronous permanent magnet motor with the same characteristics. Moreover, the system Botvinnik et al disclosing an asynchronous-synchronous machine 35 and a converting unit 38 forming an integral an essential

part of system control circuitry for modulating an RPM operation so Botvinnik et al teaches the defects of Thaxton et and Thaxton et al does disclose a synchronous permanent magnet motor and synchronous permanent magnet generator with the same characteristics, as explained above.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Regarding claim 6, page 2 ,line 15, the phrase "or similar device" renders the claim(s) indefinite because the claim(s) include(s) elements not actually

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disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 6 and 9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Thaxton a US patent 6,188,139.
2. Regarding claim 6, Thaxton'139 discloses a marine power distribution arrangement Turbo machine (Fig.2) propulsion system for ships comprising: a driving machine (11) and a synchronous, inherently permanent magnet electrical generator (12 "Fig .3 does not show any excitation input to the magnet"), an electrical output and a plurality of poles, powered directly by the driving machine; a synchronous, permanent magnet electrical propulsion motor (41) having a plurality of poles, powered by the output of the electrical generator (see Fig. 2), with a fixed and direct electrical connection thereto; and a propeller (Fig.2) or similar propulsion device operated by a mechanical connection (40) to the electrical propulsion motor (41), the electrical generator and the electrical propulsion motor having operating characteristics which are substantially the same (they both synchronous type machine) .
3. Regarding claim 9, Propulsion system of Thaxton'139 the output of the electrical generator is additionally connected to a branch circuit for feeding a consumption

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network (see Fig. 2 a converter/rectifier/inverter) being provided between the output and the branch circuit to provide a stable frequency from the generator.

4. Regarding claim 11 and 12 Propulsion system Thaxton'139 teaches also, a frequency converter (55/57) being provided between the auxiliary generator and the consumption network further the engine is a diesel engine (6) or gas turbine engine.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7,8,10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thaxton'133 further in vie of Botvinnik US Patent 3,859,578.

7. Thaxton'133 teaches all limitation of claimed invention except the ratio between the number of poles in the generator, the number of poles in the propulsion motor of 3:1 to 1:20 and the generator having fewer poles than the propulsion motor and an auxiliary generator.

8. Regarding claim 10, Botvinnik '578 discloses a system having a main generator and an auxiliary generator (35) and a converter unit (38) for the use of devices inside the ship.

9. It would have bee obvious to one having the ordinary skill in the art at the time the invention was made to combine Thaxton'139 Marine generating system with an

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auxiliary generator as taught by Botvinnik '578 for the purpose of additional power supply for the system.

10. Regarding claims 7,8 ,13,14, it would have bee obvious to one having the ordinary skill in the art at the time the invention was made to provide a ratio between the number of poles in the generator and the number of poles in the propulsion motor of 3:1 to 1:20 and having the generator with fewer poles than the propulsion motor and the generator has six or 24 poles, yielding 50 Hz at 1000 rpm. for the purpose of improvement of operation, since it has been held that discovering on optimum value of a result effective variable involves only routine skill in the art. In re Boesh, 617 F.2d 272 205 USPQ 215 (CCCPA 1980).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IRAJ A. MOHANDESI whose telephone number is (571)272-2028. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Iraj A Mohandesi July 16, 2010

/T C Patel/

Supervisory Patent Examiner, Art Unit 2839